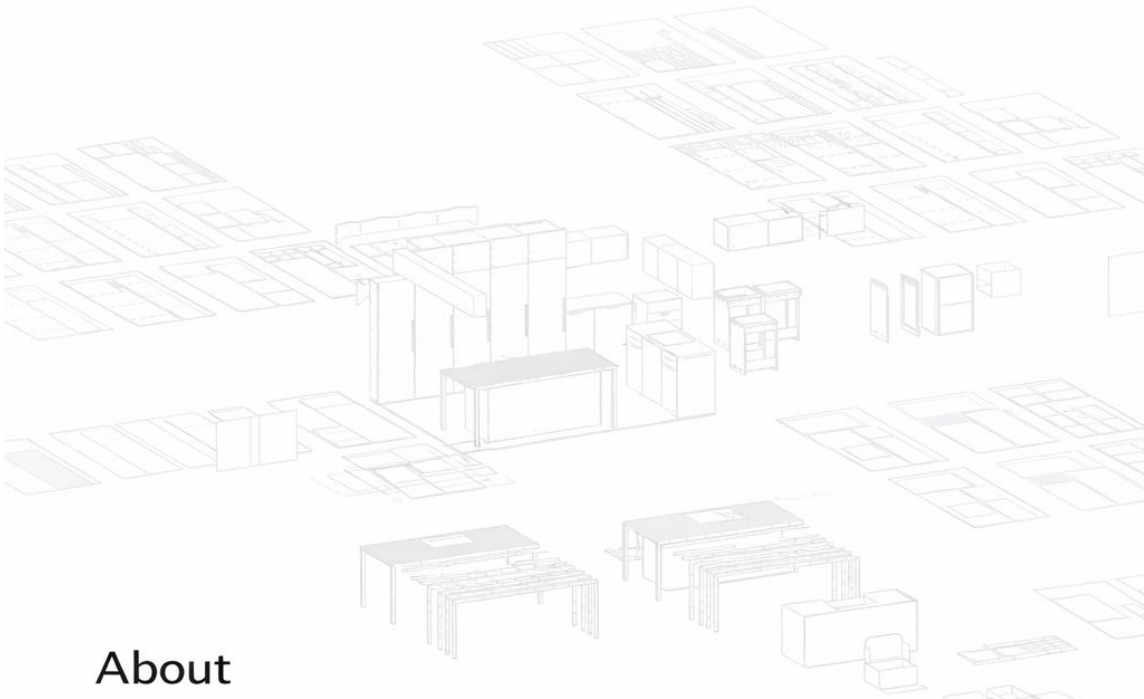


# Darren O'Neill

## SketchUp Pro Portfolio



### About

I'm Darren O'Neill, a **designer and maker** specialising in SketchUp Pro and SketchUp Layout for bespoke cabinetry and fitted furniture. My work is centred on model-led workflows, where accurate 3D models form the single source for production, installation, and CNC preparation.

With a background in architecture and product design education, I place strong emphasis on clarity, organisation, and buildability. Models are structured using components, tags, and consistent conventions to support efficient drawing output and reliable manufacture.

Through **Koa Design** (est. 2020), I work on bespoke projects where drawings need to translate cleanly from screen to workshop, ensuring consistency from design intent through to final installation.

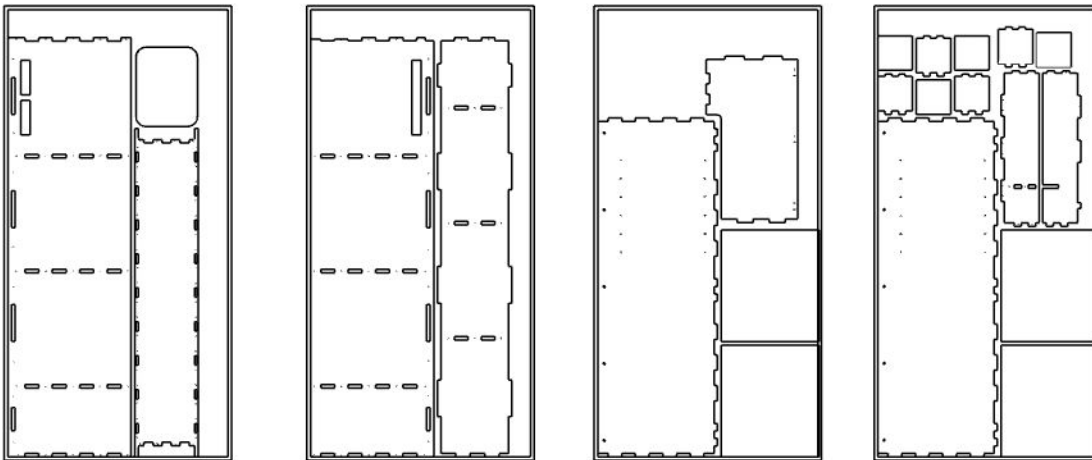
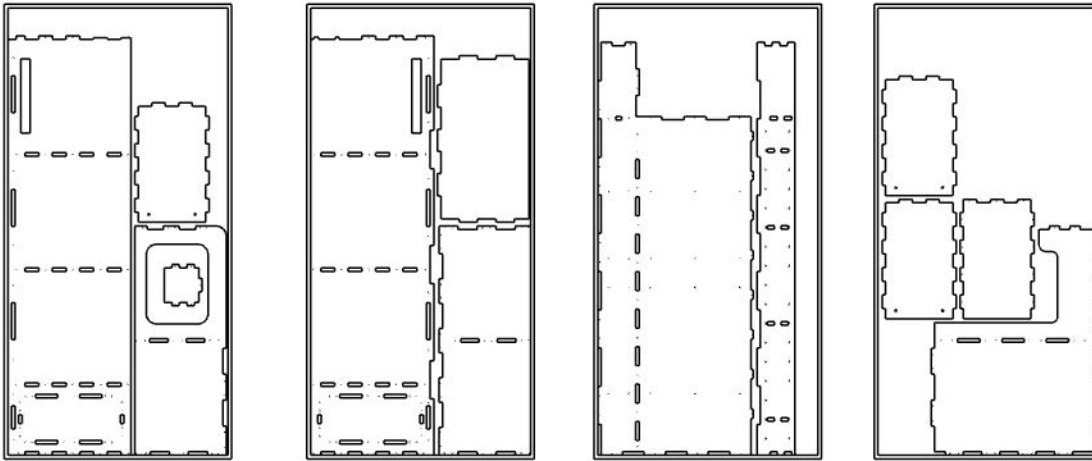
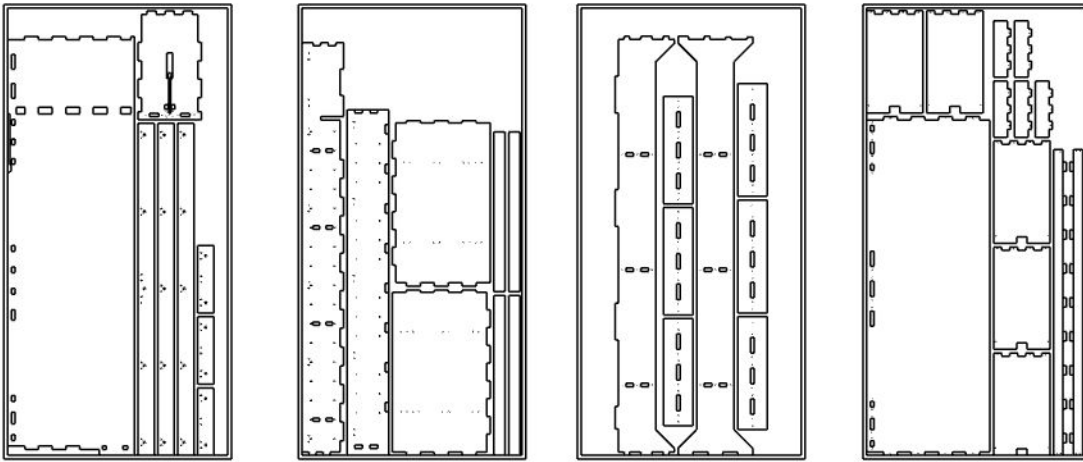


## KITCHEN IN BIRCH

Heswall - Wirral - 2024

### BRIEF

Create a minimal, modern kitchen that feels calm, spacious, and natural centered around clean lines, light tones, and functional design.



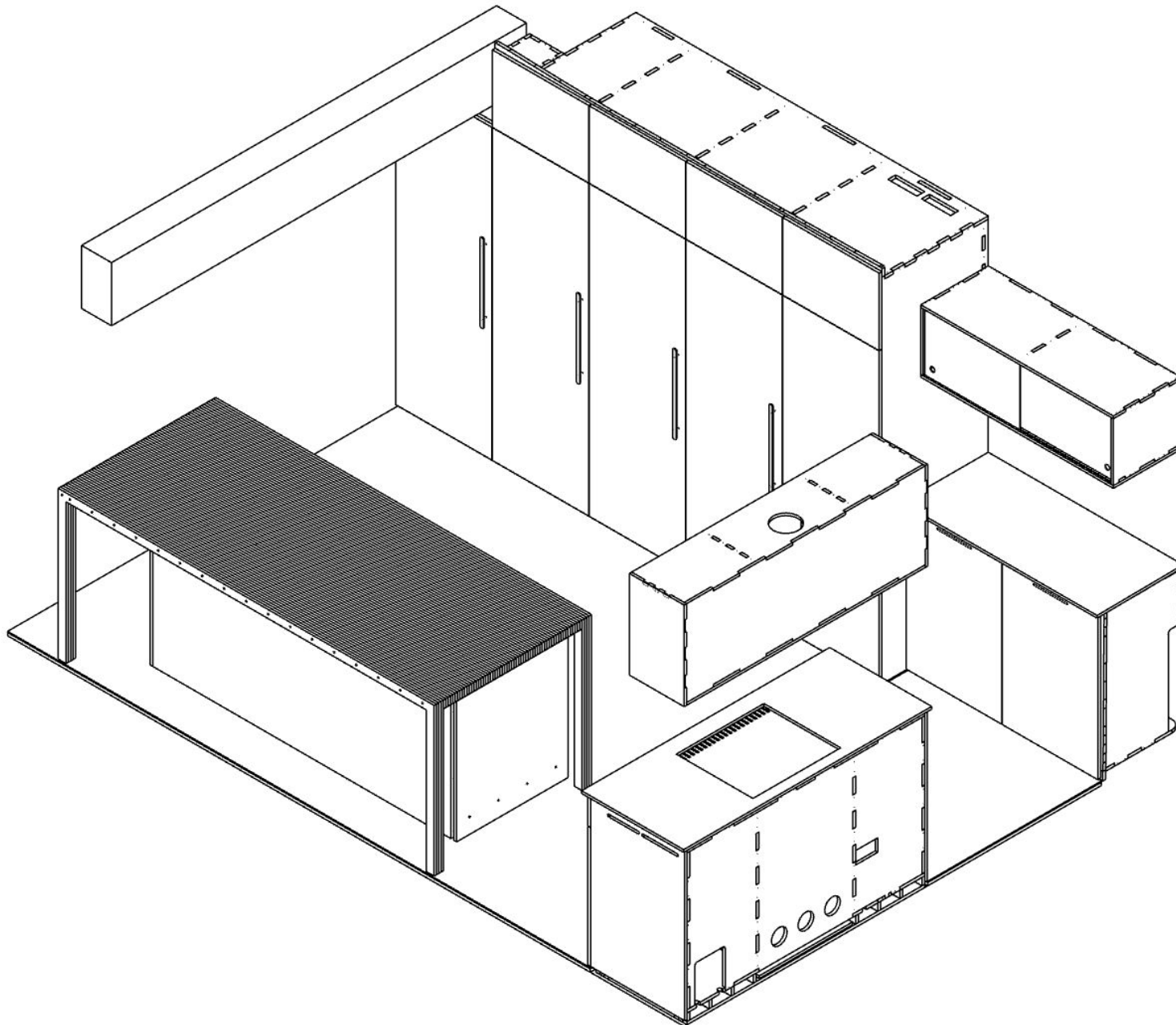
## KITCHEN IN BIRCH

Heswall - Wirral - 2024

### CNC Nested Layouts – Bespoke Kitchen (18 mm Birch Plywood)

CNC nested layouts prepared for a bespoke kitchen in 18 mm birch plywood, developed from a structured SketchUp model using consistent workflows and drawing conventions.

Components are organised to maintain accuracy, material efficiency, and alignment between the 3D model, manufacturing drawings, and CNC output.



## KITCHEN IN BIRCH

Heswall - Wirral - 2024

### 3D Model & Production Drawings

All production drawings are generated directly from an accurate 3D model, ensuring alignment between the model, manufacturing drawings, and final installation.

Components and tags are used consistently to organise geometry, control visibility, and support clear, reliable production documentation.

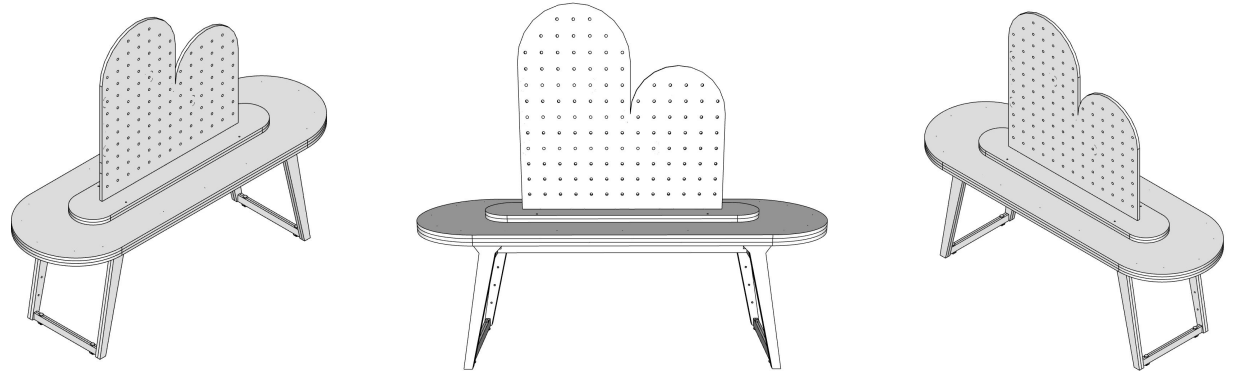
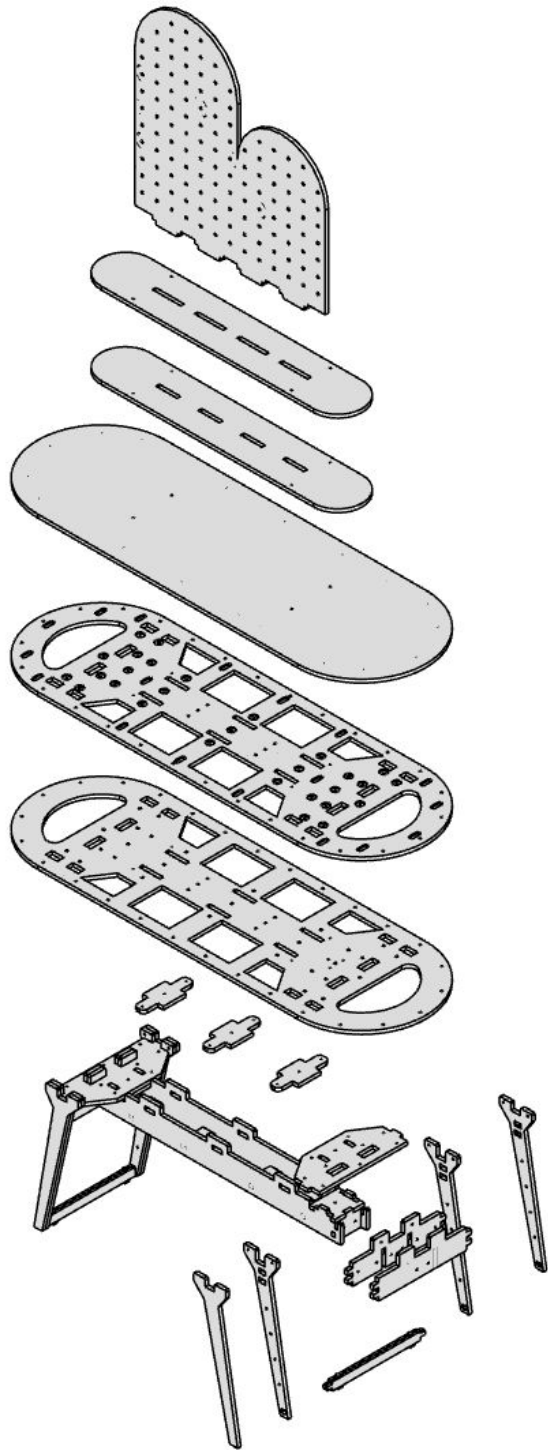


## Kiosks for Specialty Leasing

White City - London - 2024

### BRIEF

Koa Design was commissioned to support the development of modular “Pop Up” kiosks for Specialty Leasing at Westfield UK malls. The goal: create a flexible, high quality solution that allowed incoming tenants to activate their spaces quickly, without compromising on design, sustainability, or impact.



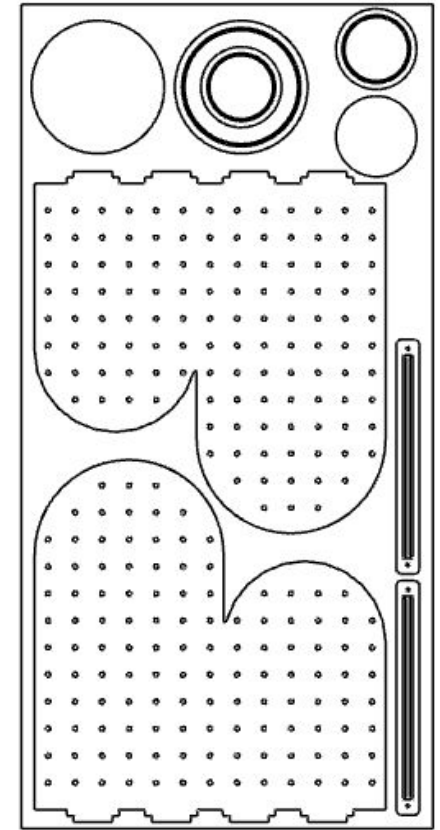
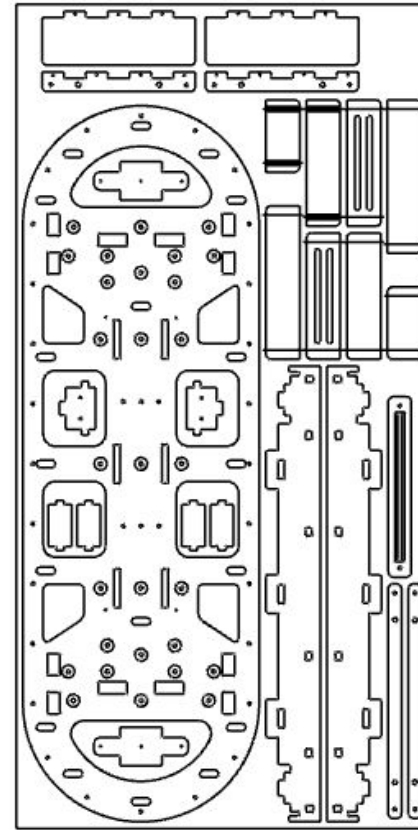
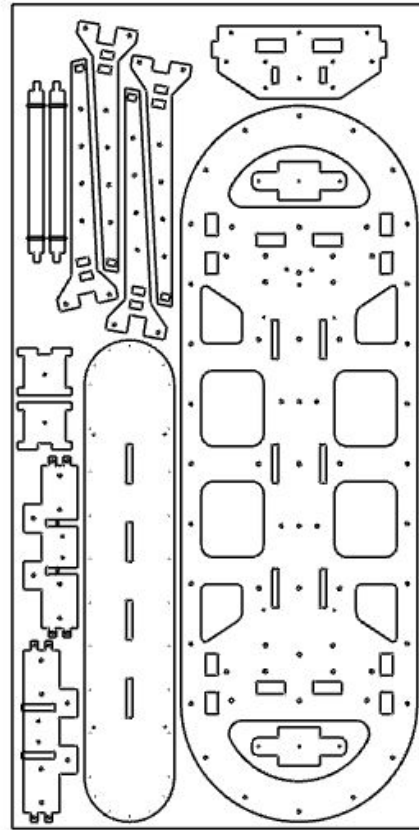
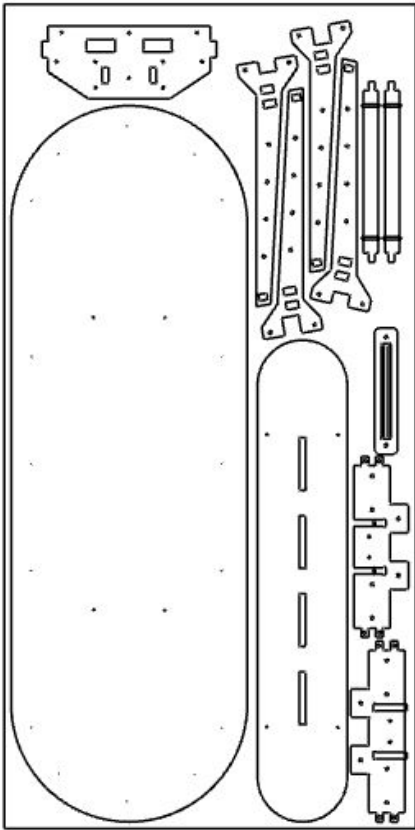
## Kiosks for Specialty Leasing

White City - London - 2024

### Exploded Assembly – CNC-Manufactured Furniture Component

Exploded assembly view developed in SketchUp Pro, following clear internal workflows and drawing conventions. Components are grouped, named, and oriented to reflect real manufacturing logic, allowing the model to translate directly into manufacturing and installation drawings in SketchUp Layout.

The design is developed with CNC manufacture in mind, incorporating accurate material thicknesses, tolerances, and assembly sequencing. This approach ensures consistency between the 3D model, cutting information, and build documentation, supporting clear communication through manufacture and installation.

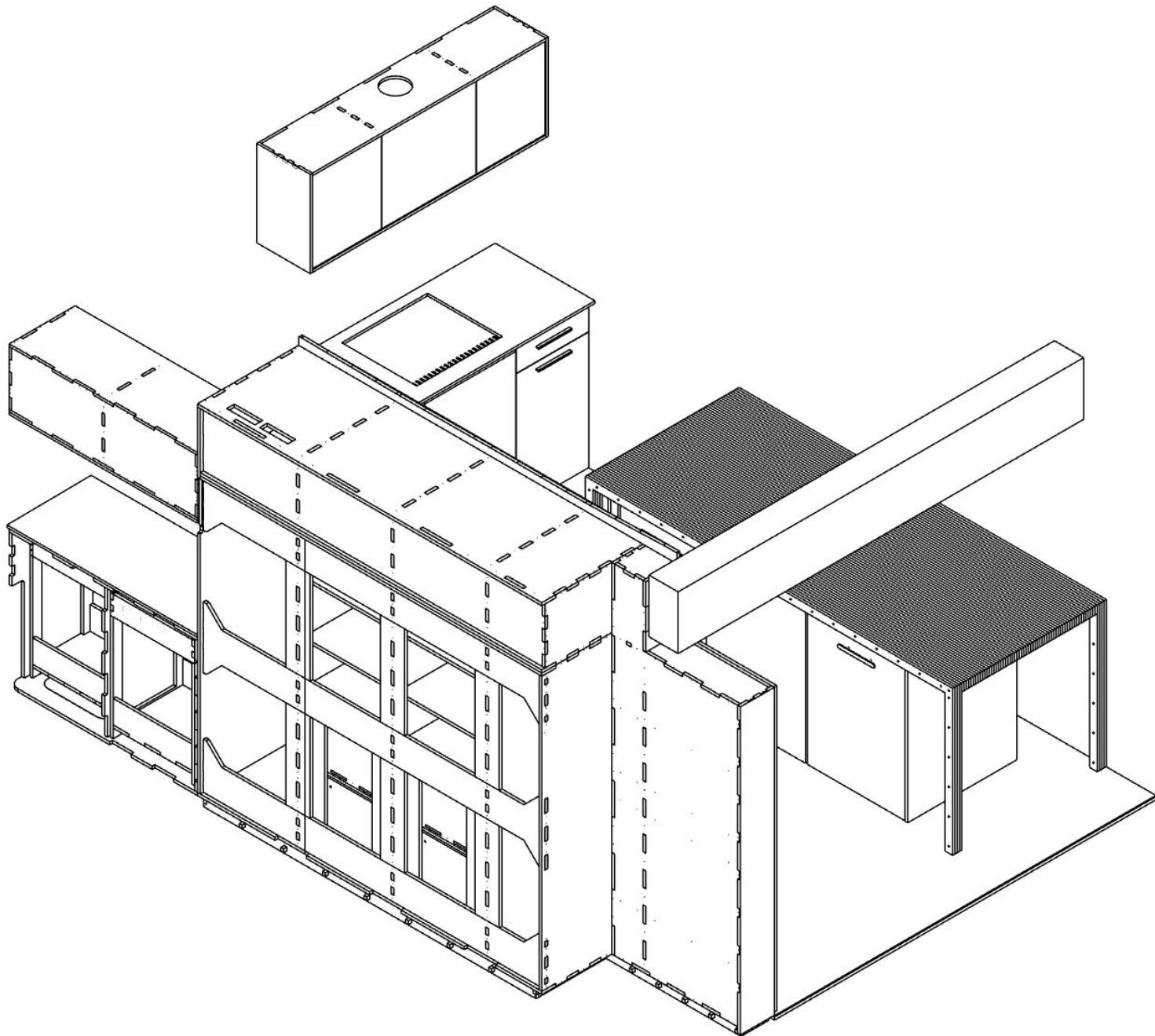


## Kiosks for Specialty Leasing

White City - London - 2024

### CNC Nested Layouts – Manufacturing Preparation

CNC nested layouts generated from the SketchUp model, following consistent workflows and naming conventions to ensure efficient cutting and accurate manufacture. Layouts are prepared to maintain alignment between the 3D model, manufacturing drawings, and CNC output.



## KITCHEN IN BIRCH

Heswall - Wirral - 2024

### Model-Led Production Drawings – Bespoke Kitchen

Alternative model view showing the coordinated assembly used to generate all production and installation drawings.

The model is organised using components and tags to control visibility and ensure consistency across drawings.

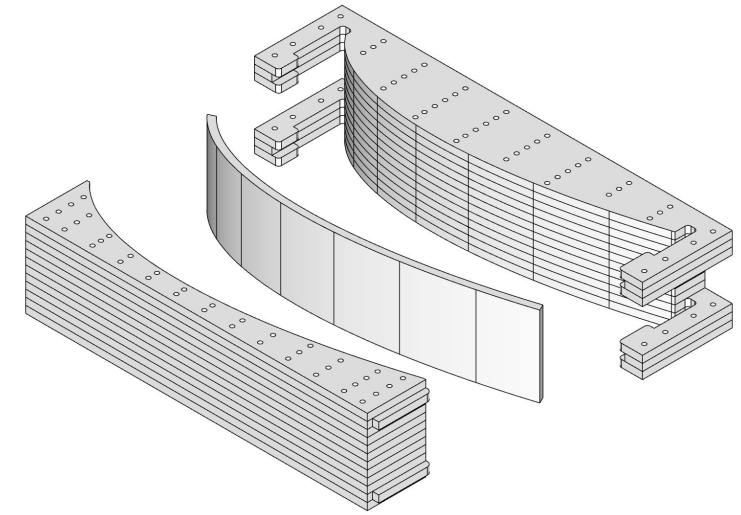
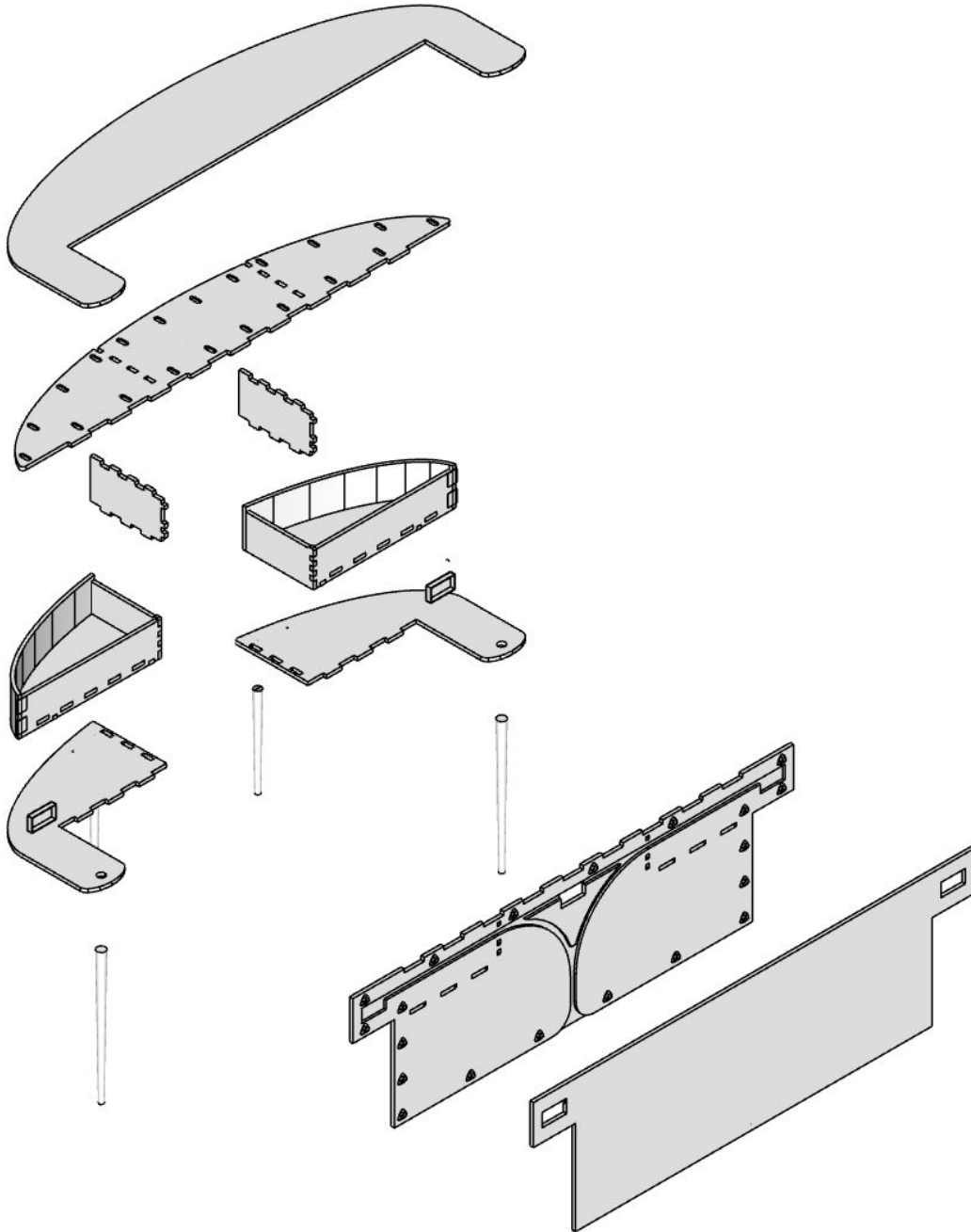


## Dressing table

Parkgate - Wirral - 2025

### BRIEF

Create a bespoke dressing table that wraps seamlessly around the bed, allowing it to face stunning views of the Dee Estuary while preserving flow and symmetry in the space.



## Dressing table

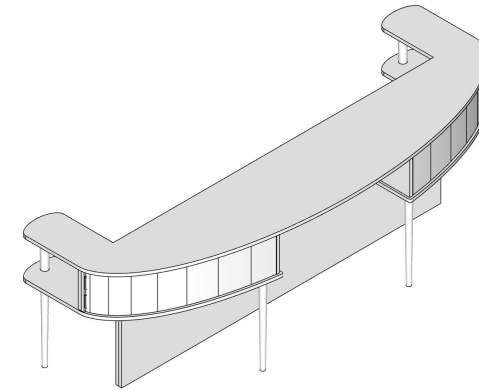
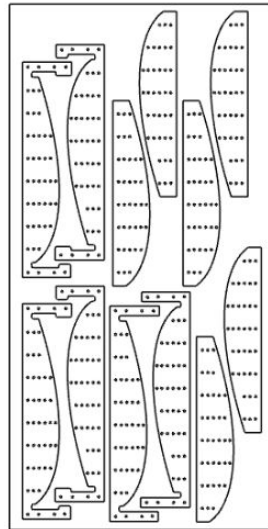
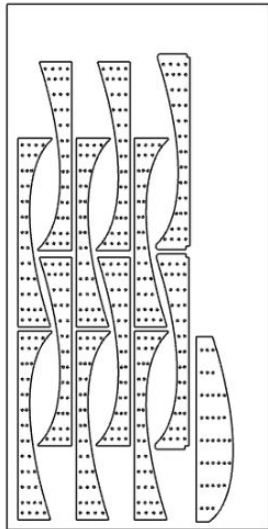
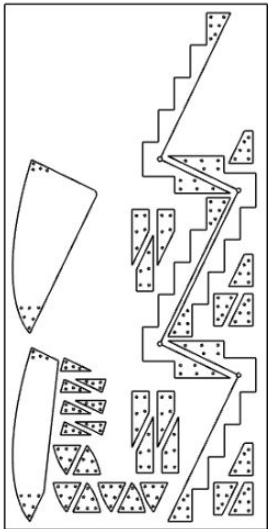
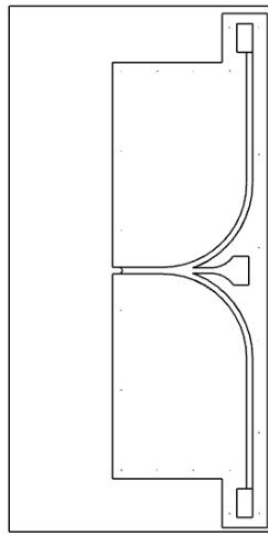
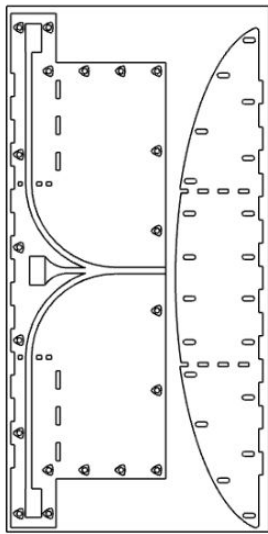
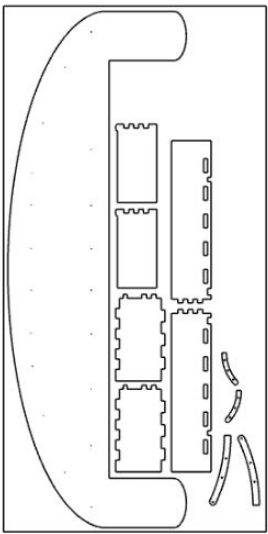
Parkgate - Wirral - 2025

### Laminating Former – Curved Drawer Fronts

Model view of a laminating former used to produce curved drawer fronts, designed to control radius, layer alignment, and consistency during lamination. The former is developed as part of the same model-led workflow, ensuring accuracy and repeatability from design through manufacture.

### Exploded Assembly – Curved Drawer Unit

Exploded assembly view showing the component breakdown of a curved drawer unit, developed in SketchUp Pro to communicate part relationships, fixing strategy, and assembly sequence. Components are modelled to reflect real manufacturing constraints and translate directly into production drawings.

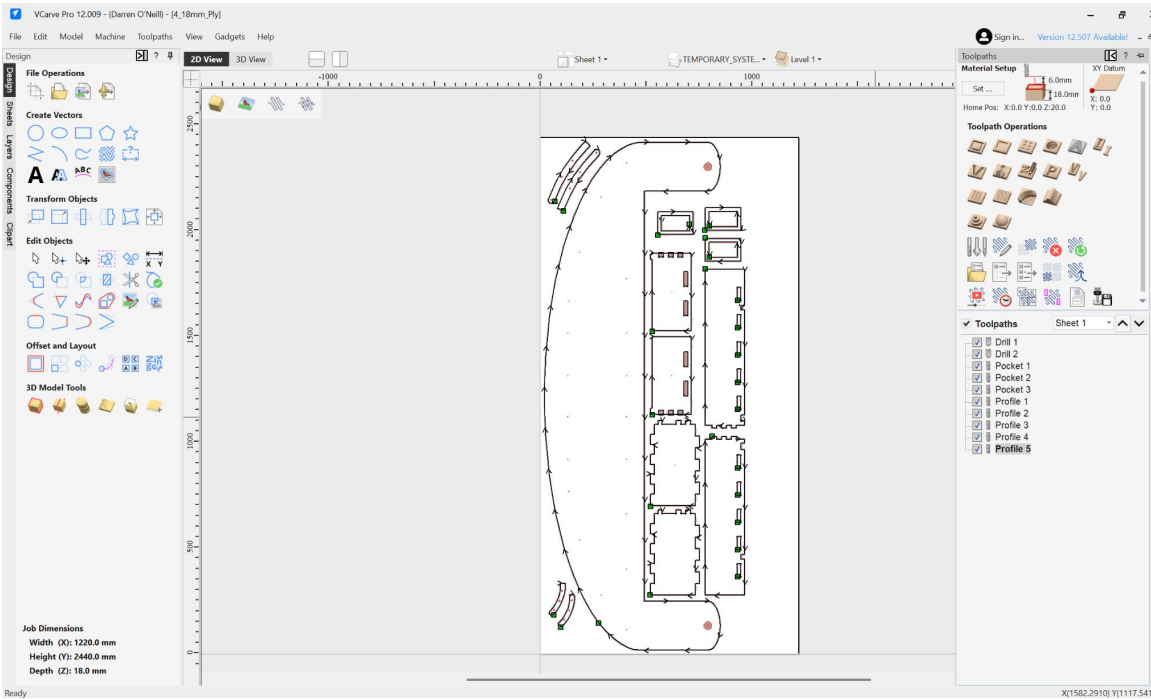


## Dressing table

Parkgate - Wirral - 2025

### CNC Nested Layouts – Curved Drawer Components

CNC nested layouts prepared for the curved drawer unit, generated directly from the SketchUp model using consistent workflows and naming conventions. Components are organised to support accurate machining, efficient material use, and alignment between the model, production drawings, and manufacture.



## Dressing table

Parkgate - Wirral - 2025

### CNC Preparation and Toolpath Strategy

Components modelled in SketchUp and prepared for CNC machining using VCarve Pro. Toolpaths include drilling, pocketing and profiling operations with parts nested to maximise sheet efficiency. The workflow ensures components are production-ready with clear machining logic and minimal material waste.

